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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	1
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of 1

Complete if Known

Application Number	10/020.838
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Filing Date	12/10/2001
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First Named Inventor	David W. Brown
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Group Art Unit	2142
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Examiner Name	Jack Harvey
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Attorney Docket Number	P214009
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U.S. PATENT

[illegible]

FOREIGN PATENT

[illegible]

**Examiner
Signature**

Hien le

Date
Considered

10-13-05

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1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1

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Complete if Known

Application Number	10/020,838
Filing Date	12/10/2001
First Named Inventor	David W. Brown
Group Art Unit	2142
Examiner Name	Jack Harvey
Attorney Docket Number	P214009

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	†
HL		MICROSOFT CORPORATION; "Dynamic Data Exchange"; <u>Windows 3.1 SDK Guide to Programming</u> ; 1992, 1993; Chapter 22; 21 pages.	
HL		MICROSOFT CORPORATION; "Dynamic Data Exchange Management Library"; <u>Win32 SDK: Prog. Ref. Vol. 2</u> ; 1992, 1993; Chapter 77; 26 pages.	
HL		MICROSOFT CORPORATION; "Network Dynamic Data Exchange"; <u>Windows for Workgroups 3.1 Resource Kit</u> ; 1992, 1993; Chapter 11; 19 pages.	

Examiner
Signature

H. W. Le

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Sheet 1 of 10

Complete if Known

Application Number	10/020,838
Filing Date	12/10/01
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	Le, Hieu C
Attorney Docket Number	P214009

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U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ²	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ³			
HL		5,977,951		Danieli et al.	11-1999	
		5,746,602		Kikinis	05-1998	
		5,752,880		Gabai et al.	05-19-1998	
		5,733,131		Park	03-31-1998	
		5,636,994		Tong	06-10-1997	
		5,655,945		Jani	08/12/1997	
		4,846,693		Baer	07-11-1989	
		5,873,765		Rifkin et al.	02-23-1999	
		4,809,335		Rumsey	02-28-1989	
		5,846,132		Junkin	12-08-1998	
		5,890,963		Yen	04-06-1999	
		5,707,289		Watanabe et al.	01-13-1998	
		5,800,268		Molnick	09-01-1998	
		5,907,831		Lotvin et al.	05-25-1999	
		5,801,946		Nissen et al.	09/01/1998	
		4,840,602		Rose	06-20-1989	
		4,857,030		Rose	08/15/1989	
		5,607,336		Lenensfeld et al.	03/04/1997	
		5,596,994		Bro	01-1997	
		5,377,258		Bro	12-1994	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ²	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Office ³	Number	Kind Code ⁵ (if known)				
HL			EP0508912 A1		European Patent Office	10-14-1992		
			0275826 A1		European Patent Office	07-1998		
			0442676 A2		European Patent Office	08-1991		
			WO 95/07504		WIPO	03-1995		
			0 281 427 B1		Pierce et al.	08-05-1992		
			0 583 908 A2		Edgar et al.	02-23-1994		
			Japanese 59 228473			06-09-1983		
			2 224 896 A		Powell	12-11-1991		
			WO 92/11731		WIPO/Bell	07-09-1992		
			WO 93/08654		WIPO/Stillman et al.	04-29-1993		

Examiner Signature	Hieu C	Date Considered	10-13-05
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Sheet	3	of	10
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Attorney Docket Number	P214009
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Application Number	10/020.838
Filing Date	12/10/01
First Named Inventor	David W. E
Group Art Unit	2153
Examiner Name	Le. Hieu C

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U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ²	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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HL		5,126,932		Wolfson et al.	06-1992	
		5,175,817		Adams et al.	12-1992	
		5,245,703		Hubert	09-1993	
		5,247,650		Judd et al.	09-1993	
		5,390,330		Talati	02-1995	
		5,491,813		Bondy et al.	02-1996	
		5,604,843		Shaw et al.	02-1997	
		5,608,894		Kawakami et al.	03-1997	
		5,168,441		Onarheim et al.	12-1992	
		5,392,207		Wilson et al.	02-1995	
		5,412,757		Endo	05-1995	
		5,465,215		Strickland et al.	11-1995	
		5,907,704		Gudmundson et al.	05-1999	
		5,914,876		Hirai	06-1999	
		5,855,483		Collins et al.	01-05-1999	
		4,159,417		Rubincam	06-26-1979	
		4,767,334		Thorne et al.	08-30-1988	
		4,855,725		Fernandez	08-08-1989	
		4,887,966		Gellerman	12-19-1989	
		5,120,065		Driscoll et al.	06-09-1992	

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Examiner Signature	Allen G	Date Considered	10-13-05
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/020,838
Filing Date	12/10/01
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	Le, Hieu C
Attorney Docket Number	P214009

Sheet 4 of 10

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ²	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ³			
HL		5,402,518		Lowery	03-28-1995	
		5,450,079		Dunaway	09-12-1995	
		5,670,992		Yasuhara et al.	09-23-1997	
		6,101,425		Govindaraj et al.	08-08-2000	
		5,852,441		Nakajima et al.	12-22-1998	
		5,822,207		Hazama et al.	10-13-1998	
		5,737,523		Callaghan et al.	04-07-1998	
		5,652,866		Aldred et al.	07-29-1997	
		4,418,381		Molusis et al.	11-29-1983	
		6,144,895		Govindaraj et al.	11-07-2000	
		5,764,155		Kertesz et al.	06-09-1998	
		5,617,528		Stechmann et al.	04-01-1997	
		5,828,575		Sakai	10-27-1998	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Office ³	Number	Kind Code ⁵ (if known)				

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Signature

Hieu C

Date
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10-13-05

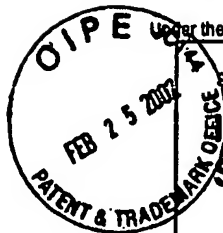
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 5 of 10

Complete if Known

Application Number	10/020.838
Filing Date	12/10/01
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	Le, Hieu C
Attorney Docket Number	P214009

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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HL		WOSA Backgrounder: Delivering Enterprise Services to the Windows-based Desktop, July 1993, Microsoft Development Library; pp. 1-19	
		WOSA INSIDE WINDOWS 95; pp. 348-351	
		Software Products for Industrial Automation, ICONICS; 6 pages	
		WEB 3.0 Product Brochure, Trihedral Engineering Ltd. (1994); 6 pages	
		The Complete, Computer-Based Automation Tool (IGSS) Seven Technologies A/S; 6 pages	
		Oregon Micro Systems Product Guide; pp. 1-20	
		AIMAX-WIN Product Brochure, TA Engineering Co., Inc.; 8 pages	
		XANALOG Model NL-SIM Product Brochure, XANALOG, 4 pages	
		ExperTune PID Tuning Software, Gerry Engineering Software; 6 pages	
		PMAC Product Catalog, page 43	
		Paragon TNT Product Brochure, Intec Controls Corp.; 6 pages	

Examiner Signature	Hieu C	Date Considered	10-13-05
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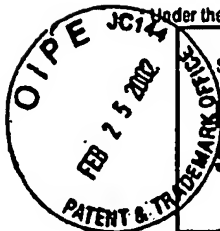
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Sheet **6** of **10**

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Application Number **10/020,838**
Filing Date **12/10/01**
First Named Inventor **David W. Brown**
Group Art Unit **2153**
Examiner Name **Le, Hieu C**
Attorney Docket Number **P214009**

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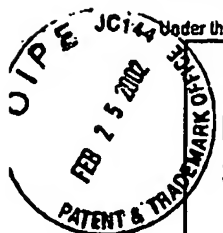
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HL		Aerotech Motion Control Product Guide; pp. 233-234	
		OpenBatch Product Brief, PID, Inc.; 6 pages	
		PC/DSP-Series Motion Controller C Programming Guide; pp. 1-54	
		FIX Product Brochure, Intellution (1994); 6 pages	
		Precision Motion Controls Product Guide; page 17	
HL		Compumotor Digiplan (1993-94) Catalog pp. 10-11	

Examiner Signature	Hieu C	Date Considered	10-13-08
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**INFORMATION DISCLOSURE
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Sheet 7 of 10

Complete If Known

Application Number	10/020,838
Filing Date	12/10/01
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	Le, Hieu C
Attorney Docket Number	P214009

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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HL		SUE CHEN, JONATHON LIN; "Computer Numerical Control: Essentials in Programming and Networking"; Part 5, Chapter 27; pp. 824-848	
		PRITSCHOW et al.; "Open System Controllers: Challenge for the Future of the Machine Tool Industry"; pub. 1/15/93; pp. 449-452	
		WILLIAM E. FORD; "What Is an Open Architecture Robot Controller" pub. 8/16/94; pp. 27-32	
		MARCOS et al.; "A New Solution for Integrating Control Devices Involved in Computer-Integrated Manufacturing"; pub. 9/2/96; pp. 485-490	
		CHU AND WANG; "Development of a Practical SFC System for CNC Machine Shop"; pub. 1994; pp. 362-367	
		MICROSOFT; "The Microsoft Object Technology Strategy"; pub. March 1994; pp. 1-33	
		MICROSOFT; "Open Systems: Technology, Leadership, and Collaboration"; pub. March 1994; pp. 1-15	
		MICROSOFT; Microsoft OLE Today and Tomorrow: Technology Overview"; pub. December 1993; pp. 1-9	
		MICROSOFT; "Object Linking and Embedding 2.0 Backgrounder"; pub. September 1993; pp. 1-15	
		ROBERT ANDERSON; "SMART: A Modular Architecture for Robotics and Teleoperation"; pub. 1993; pp. 416-421	
✓		PROCTOR et al.; "Validation of Standard Interfaces from a Machine Control"; pub. 1996; pp. 659-664	

Examiner Signature	Hieu C	Date Considered	10-15-05
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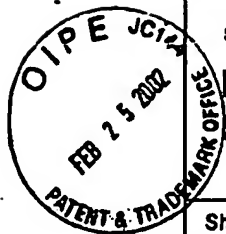
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Sheet 8 of 10

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Examiner Name Le, Hieu C
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HZ		ALTINTAS et al.; "Design and Analysis of a Modular CNC System"; pub. 3/4/90; pp. 305-316	
		WRIGHT et al.; "Open Architecture Manufacturing: The Impact of Open-System Computers on Self-sustaining Machinery and the Machine Tool Industry"; pp. 41-47	
		PROTOCTOR et al.; "Open Architecture Controllers"; pub. June 1997; pp. 60-64	
		LUTZ et al.; "OSACA-The Vendor-Neutral Control Architecture"; pub. December 1997; pp. 247-256	
		MORALES et al.; "A Generalised Software Control System for Industrial Robots"; pub. 1998; pp. 411-416	
		FENG et al.; "Distributed Control of a Multiple-Tethered Mobile Robot System for Highway Maintenance and Construction"; pub November 1997; pp. 383-392	
		FEDROWITZ; "IRL-Based Expansion of the Commonly Used High-Level Language C for Robot Programming;" pub. Oct. 1995; 5 pages	
		SZABO et al.; "Validation Results of Specifications for Motion Control Interoperability"; pub. 1997; pp. 166-167	
		CHANG et al.; "Development and Implementation of an Application Programming Interface for PC/DSP-based Motion Control System"; pub. 1998; pp. 94-105	
		ERROL et al.; "Open System Architecture Modular Tool Kit for Motion and Machine Control"; pub. September 2000; pp. 281-291	
		MIZUKAWA et al.; "OriN: Open Robot Interface for the Network: A Proposed Standard"; pub. May 2000; pp. 344-350	

Examiner Signature	Hieu C	Date Considered	10-13-05
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First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	Le, Hieu C
Attorney Docket Number	P214009

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HL		MICHALOSKI et al.; "A Framework for Component-base CNC Machines" pub. November 1998; pp. 132-143	
		BOUZOUIA et al.; "A Three-layer Workcell Control Architecture Design"; pub. May 1998; pp. 1185-1191	
		MORALES et al.; "GENERIS: The EC-JRC Generalized Software Control System for Industrial Robots"; pub. 1999; pp. 26-33	
		MUIR et al.; "Mechatronic Objects for Real-time Control Software Development"; pub. November 1998; pp. 251-265	
		CHO et al.; "A Compact/Open Network-based Controller Incorporating Modular Software Architecture for a Humanoid Robot"; pub. 1999; pp. 341-355	
		GE et al.; "A One-stop Solution in Robotic Control System Design"; pub. September 2000; pp. 42-55	
		MCGRAW et al.; "A Friendly Command, Control, and Information System for Astronomy"; pub. 1996; pp. 356-367	
		JACKMAN; "Robotic Control Using Sequential Function Charts"; pub. 1996; pp. 120-128	
		MIZUKAWA et al.; "De-facto Standard API for Open and Networked Industrial Robots"; pub. October 1999; pp. 455-462	
		LEU et al.; "A Telemanufacturing Workcell over the Internet"; pub. November 1998; pp. 230-237	
		NATALE et al.; "Robust Hybrid Force/Position Control with Experiments on an Industrial Robot"; pub. September 19, 1999; pp. 956-961	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 10 of 10

Complete If Known

Application Number 10/020,838
 Filing Date 12/10/01
 First Named Inventor David W. Brown
 Group Art Unit 2153
 Examiner Name Le, Hieu C
 Attorney Docket Number P214009

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HL		VALERA et al.; "Interactive Online Evaluation of Robot Motion Control"; pub. August 22, 1999; pp. 1039-1043	
		"NEMI Low-cost Controller Project"; pub. December 1996; total pages 392	et
		SPERLING; "Designing Applications for an OSACA Control"; pub. November 16, 1997; 5 pages	
		LUTZ et al.; "OSACA: The Vendor-neutral Control Architecture"; pub. 1997; 10 pages	
		SPERLING et al.; "Enabling Open Control Systems: An Introduction to the OSACA System Platform"; pub. May 1996; pp. 1-8	
		"Requirements of Open Modular Architecture Controllers for Applications in the Automotive Industry"; pub. 12/13/94; pp. 1-13	
		Open, Modular Architecture Controls at GM Powertrain"; pub. May 14, 1996; pp. 1-33	
✓		"Technologies Enabling Agile Manufacturing (TEAM) Intelligent Closed Loop Processing"; pub. January 11, 1996; 30 pages	

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